

Claims

1. A multifunctional pushbutton switch with a plurality of pushbutton switching units that have pushbutton surfaces located close to each other in a shared operating surface, especially for a vehicle steering wheel, comprising a
5 shared switch housing in which actuation tappets of the pushbutton switching units are movably guided, and a cap mounted over the actuation tappets and onto the switch housing, said cap being made by means of a two-component injection-molding technique and consisting of a relatively rigid plastic frame with recessed windows each of a shape and size that corresponds to the circumference of one of
10 the pushbutton surfaces and of a silicone membrane extending over the recessed windows.

2. The multifunctional pushbutton switch according to Claim 1, wherein a cross-shaped or star-shaped support structure is formed in one piece with the plastic frame to extend between the recessed windows.

15 3. The multifunctional pushbutton switch according to Claim 1, wherein the actuation tappets are pressed resiliently against the inner surface of the silicone membrane and are retained by stop members in unactuated resting positions.

4. The multifunctional pushbutton switch according to Claim 3, wherein the support structure has a layer of silicone material on its side facing away from the
20 silicone membrane, said layer forming an abutment that interacts with corresponding stop surfaces on the actuation tappets.

5. The multifunctional pushbutton switch according to claim 1, wherein the shared operating surface formed by the outer surface of the silicone membrane has an altogether convex curvature.

25 6. The multifunctional pushbutton switch according to claim 1, wherein the actuation tappets have a projection or indentation that can be felt through the silicone membrane and is formed on an operating surface that lies against the inner surface of the silicone membrane.

7. The multifunctional pushbutton switch according to claim 1, wherein the plastic frame and the silicone membrane are joined with an inter-material bond.

8. The multifunctional pushbutton switch according to Claim 7, wherein the silicone membrane engages behind the outer circumference of the plastic frame
5 with a form fit.